Reviewer's report

Title: Characterization of a novel PTEN mutation in MDA-MB-453 breast carcinoma cell line

Version: 3 Date: 26 July 2011

Reviewer: Andrew Green

Reviewer's report:

This is a well written manuscript describing the investigation of PTEN mutation in breast cancer cell line MDA-MB-453.

The authors state in their discussion that MDA-MB-453 is the only cell line with this PTEN mutation but do not provide any evidence that they have screened other breast cancer cell lines except MCF-7. Data for other cell lines needs to be included or the sentence revised.

Whilst MDA-MB-453 is derived from a 42 year old female it is a very tenious link to suggest that the PTEN mutation may represent a germ-line mutation.

Statistical analysis is missing from Figure 2. Please include to demonstrate differences.

Minor Essential Revisions

Methods. Please state which antibody was used for Western Blotting for PTEN as it is currently unclear.

Fig 1. The asterisk below the PTEN is very small and needs to be enlarged.

Fig 2. Label for D is missing

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests